ELSEVIER

General Subjects

Vol. 1200, 1994

BBA Biochimica et Biophysica Acta

Cumulative Contents

Information for Contributors vii

Regular Papers

Isolation of nitric oxide synthase from human platelets
A. Muruganandam and B. Mutus (Canada) 1

Characterization of cytochromes *P*-450 purified from untreated and ^{14}C-2,3,7,8-tetrachlorodibenzo-*p*-dioxin – treated marmoset monkeys: Identification of the major form as a possible orthologue of *P*-450 1A2
M. Kastner and D. Neubert (Germany) 7

Involvement of testosterone in the induction of hepatic microsomal cytochrome *P*-450 2B1/2 (*P*-450 2B1/2) by 1-benzylimidazole in male and female rats: sex-differentiated induction of *P*-450 2B1/2 species
Y. Kobayashi, T. Yoshida, E. Kotani, T. Aoyagi, Y. Kuroiwa and S. Tobinaga (Japan) 11

Effects of solvents and media on the antioxidant activity of α-tocopherol
M. Iwatsuki, J. Tsuchiya, E. Komuro, Y. Yamamoto and E. Niki (Japan) 19

Purification and some properties of a novel racemase, which racemizes 2-oxothiazolidine-4-carboxylic acid and 5-oxoproline, from *Flectobacillus* sp. strain B-1
K. Mochizuki, K. Hosono and H. Kobayashi (Japan) 27

Dietary fat regulates cellular retinol-binding protein II gene expression in rat jejunum
T. Goda, H. Yasutake and S. Takase (Japan) 34

Ferritin-dependent inactivation of microsomal glucose-6-phosphatase
S. Puntarulo and A.I. Cederbaum (Argentina, USA) 41

Quantitation of boar spermadhesins in accessory sex gland fluids and on the surface of epididymal, ejaculated and capacitated spermatozoa
Z. Dostàlovà, J.J. Calvete, L. Sanz and E. Töpfer-Petersen (FRG, Czechoslovakia, Spain) 48

Structure and conformation of the cyclic phosphate of Ganciclovir, a broad-spectrum antiviral agent
K.B. Birnbaum, R. Stolarski and D. Shugar (Canada, Poland) 55

Chemical characterization of sialyl oligosaccharides isolated from tammar wallaby (*Macropus eugenii*) milk
T. Urashima, T. Saito, Y. Tsujil, Y. Taneda, T. Takasawa and M. Messer (Japan, Australia) 64

Glutamine metabolism in rat small intestine: synthesis of three-carbon products in isolated enterocytes
M. Watford (USA) 73

Inhibition of collagen hydroxylation by lithospermic acid magnesium salt, a novel compound isolated from *Salviae miltiorrhizae* Radix
T. Shigematsu, S. Tajima, T. Nishikawa, S. Murad, S.R. Pinnell and I. Nishioka (Japan, USA) 79

Publisher's Note v

Regular Papers

Interaction of α-tocopherol with copper and its effect on lipid peroxidation
Y. Yoshida, J. Tsuchiya and E. Niki (Japan) 85

Possible role of cell redox state on collagen metabolism in carbon tetrachloride-induced cirrhosis as evidenced by adenosine administration to rats
R. Hernández-Muñoz, M. Díaz-Muñoz and V.C. De Sánchez (Mexico) 93

Influences of lovastatin administration on the respiratory burst of leukocytes and the phosphorylation potential of mitochondria in guinea pigs
B.A. Diebold, N.V. Bhagavan and R.J. Guillory (USA) 100

How muscle may contract
G.F. Elliott and C.R. Worthington (UK, USA) 109

The β-anomeric and glucose preferences of glucose transport carrier for intestinal active absorption of monosaccharide conjugates
T. Mizuma, K. Ohta and S. Awazu (Japan) 117

Overexpression in *Escherichia coli*, and one-step purification of the human recombinant ferrochelatase
M. Okuda, H. Kohno, T. Furukawa, R. Tokunaga and S. Taketani (Japan) 123

Glucose translocation and metabolism in the rat jejunum perfused in once-through mode in vitro
J.D. Hutchison, V.J. Undrill and J.W. Porteous (UK) 129

Trehalose metabolism in *Saccharomyces cerevisiae* during heat-shock
M.J.S. Ribeiro, J.T. Silva and A.D. Panek (Brazil) 139
Glucose- and ADPGlc-dependent starch synthesis in isolated cauliflower-bud amyloplasts. Analysis of the interaction of various potential precursors
O. Batz, U. Maaß, G. Henrichs, R. Scheibe and H.-E. Neuhaus (Germany) 148
Differential changes in the activity of cytosolic and vacuolar trehalases along the growth cycle of *Saccharomyces cerevisiae*
P.F. San Miguel and J.-C. Argüelles (Spain) 155
Proton NMR study of the heme complex of hemopexin
R.S. Deeb, U. Muller-Eberhard and D.H. Peyton (USA) 161
Demonstration of an ectoATP-diphosphohydrolase (E.C.3.6.1.5) in non-vascular smooth muscles of the bovine trachea
M. Picher, R. Béliveau, M. Potier, D. Savaria, É. Rousseau and A.R. Beaudoin (Canada) 167
Endoplasmic reticulum lumenal proteins of rat mammary gland. Potential involvement in lipid droplet assembly during lactation
D. Ghosal, N.W. Shappell and T.W. Keenan (USA) 175
Deduced amino acid sequence of a murine cytochrome *P*-450 Cyp4a protein: developmental and hormonal regulation in liver and kidney
C.J. Henderson, T. Bammler and C.R. Wolf (UK) 182
Differential feeding-related regulation of ubiquitin and calbindin$_{9kDa}$ in rat duodenum
M.J. Hubbard and A. Carne (New Zealand) 191
The protective effect of superoxide dismutase and catalase against formation of reactive oxygen species during reduction of cyclized norepinephrine ortho-quinone by DT-diaphorase
Y. Linderson, S. Baez and J. Segura-Aguilar (Sweden) 197
The effect of temperature on the respiration of cultured neural cells as studied by a novel electron paramagnetic resonance technique
A.I. Smirnov, S.-W. Norby, J.A. Weyhenmeyer and R.B. Clarkson (USA) 205
Characterization and regulatory properties of a single hexokinase from the citric acid accumulating fungus *Aspergillus niger*
F. Steinböck, S. Choojun, I. Held, M. Roehr and C.P. Kubicek (Austria) 215

Rapid Reports

Lipase inhibitors abolish contractions and cause depolarization in frog skeletal muscle fibres
J.D. Bruton, H. Westerblad and J. Lännergren (Sweden, Hong Kong) 224
Immunologically cross-reactive 57 kDa and 53 kDa glycoprotein antigens of bovine milk fat globule membrane: isoforms with different *N*-linked sugar chains and differential glycosylation at early stages of lactation
N. Aoki, M. Ujita, H. Kuroda, M. Urabe, A. Noda, T. Adachil, R. Nakamura and T. Matsuda (Japan) 227

Regular Papers

Isolation and characterization of two isoforms of a retinoic acid-binding protein from rabbit epididymal secretions
F. Regalado, M. Pérez Martínez, M. Soledad López de Haro and A. Nieto (Spain) 235
Appearance and fate of a β-galactanase, α,β-galactosidases, heparan sulfate and chondroitin sulfate degrading enzymes during embryonic development of the mollusc *Pomacea sp*
F.W. Oliveira, S.F. Chavante, E.A. Santos, C.P. Dietrich and H.B. Nader (Brazil) 241
alpha- and beta-xylosides modulate the synthesis of fibronectin and thrombospondin-1 by endothelial cells
A.E. Canfield, A.B. Sutton, D.R.R. Hiscock, J.T. Gallagher and A.M. Schor (UK) 249
Glycine betaine and proline betaine in human blood and urine
M. Lever, P.C.B. Sizeland, L.M. Bason, C.M. Hayman and S.T. Chambers (New Zealand) 259
Lobular patterns of expression and enzyme activities of glutamine synthase, carbamoylphosphate synthase and glutamate dehydrogenase during postnatal development of the porcine liver
G.T.M. Wagenaar, W.J.C. Geerts, R.A.F.M. Chamuleau, N.E.P. Deutz and W.H. Lamers (The Netherlands) 265
Specific incorporation of 2-thiouracil into biological melanins
A. Palumbo, A. Napolitano, L. De Martino, W. Vieira and V.J. Hearing (Italy, USA) 271
Selective suppression of IgG2a subclass in LEC rats during development
Y. Ikeda, T. Sugiyama, M. Takahashi and N. Taniguchi (Japan) 277
The captive bubble method for the evaluation of pulmonary surfactant: surface tension, area, and volume calculations
W.M. Schoel, S. Schürch and J. Goerke (Canada, USA) 281
Specificity in protein-ligand interactions: a model from estrone-antiserum binding
A. Podestà and G. Montagnoli (Italy) 291
An approach to the in vitro study of the UTP/UDPglucose/UDP moiety-conserved cycle
F. Fassy and J.-F. Hervagault (France) 297

Ineffectiveness of the inhibition of the main haemorrhagic metalloproteinase from *Bothrops jararaca* venom by its only plasma inhibitor, α2-macroglobulin
A.S. Kamiguti, H.P. Desmond, R.D.G. Theakston, C.R.M. Hay and M. Zuzel (UK) 307

Kinetic and mechanistic studies with bovine testicular hyaluronidase
J.A. Cramer, L.C. Bailey, C.A. Bailey and R.T. Miller (USA) 315

Glucose metabolism in an insect *Manduca sexta* and effects of parasitism
S.N. Thompson and R.W.-K. Lee (USA) 322

Rapid Reports

Conversion of egg-white lysozyme to a lectin-like protein with agglutinating activity analogous to wheat germ agglutinin
T. Mega and S. Hase (Japan) 331

Cloning of the putative glycogen branching enzyme gene, *glgB*, from *Streptomyces aureofaciens*
D. Homerova and J. Kormanec (Slovak Republic) 334

Characterization of a cDNA encoding the precursor of platelet aggregation inhibitor and metalloproteinase from *Trimeresurus mucrosquamatus* venom
I.-H. Tsai, Y.-M. Wang and Y.-H. Lee (Taiwan) 337

Cumulative Contents, Vol. 1200 341

Author Index 344